

Task: reaching while balancing

Serena Ivaldi & MingXing Liu

ISIR, UPMC - serena.ivaldi@isir.upmc.fr, mingxing.liu@isir.upmc.fr

Specs:

- Whole Body Task
- Balancing on the feet while reaching a distant object with the arm
 - Controls in torques, velocity, hybrid (velocity+torques)
 - Use task specification/description
 - Controller based on:

Salini, J. and Barthélemy, S. and Bidaud, Ph. and Padois, V. (2013). Whole-Body Motion Synthesis with LQP-based Controller - Application to iCub. Cognitive Systems Monographs : Modeling, Simulation and Optimization of Bipedal Walking, Springer Berlin Heidelberg, publisher. Vol 18 Pages 119-210.

Software development:

- module reachComBalance
- dependency to Eigen3, Eigen_unsupported, boost: **done**
- dependency from XDE, ORCISIR, QUADPROG: **work in progress**
 - => only available on Windows right now, requires few tricks
- because of XDE, the controller is not completely open-source :-(
 - => will have to link a pre-compiled library
- but the module is open-source and configurable, so you can use it with another controller
 - => Interfaces!
- available in CoDyCo repository (github.com/robotology/codyco)
- only tested in simulation so far :-(

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